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## The Birds of Cheney, Washington

BY ROSWELL H. JOHNSON

**C**HENEY lies out on the N. P. R. R. sixteen miles southwest of Spokane in the county of that name. The altitude of the town is from 2350 to 2450 feet. Much of the territory investigated lies from fifty to one hundred feet below this level. The nearest locality in which the birds have been previously reported upon is Fort Sherman, at Coeur d'Alene, Idaho. This is 2124 feet above sea level and forty-five miles northeast of Cheney. The avifauna there resembles that of Cheney more closely than does that of central Washington, as reported by Snodgrass. The mean annual temperature of Cheney for the past year was 48.8°. Unfortunately there are no records for previous years, but this is nearly normal because the 1904 figures of the nearest station showed only a slight deviation above normal. The distribution by months is as follows: Jan. 34.1°; Feb. 30.8°; March 32.7°; April 48.6°; May 53.2°; June 61.0°; July 68.8°; Aug. 68.9°; Sept. 60.8°; Oct. 51.0° Nov. 42.4°; Dec. 33.0°.

According to the map of life-zones by C. Hart Merriam, Cheney would be in Upper Sonoran, but the biologic evidences seem to me to place it in the Transition. I believe that the Transition is much more largely represented in the Columbia River Basin than given by Merriam. The evidence for my contention is that the following birds breed here: mountain chickadee, Audubon warbler, intermediate junco, winter wren, western wood pewee, and particularly the mountain bluebird, Cassin finch, Clarke nutcracker, black-headed jay and Louisiana tanager. On the other hand, the breeding here of the black-chinned hummer, Arkansas kingbird, western lark sparrow, spurred towhee, lazuli bunting, and especially of the Bullock oriole precludes the possibility of a Boreal classification.

On expeditions southward where the altitude was 200 feet less, I found the long-tailed chat, black-headed grosbeak and turkey vulture, and here the Lewis woodpecker and crow were more abundant than at Cheney. Fifty miles west and somewhat lower, the Brewer sparrow was seen in the sage brush. The dipper and canyon wren were observed where conditions were favorable to the south and east. Mt. Carleton (5806 ft.) and Mica Peak (5200 ft.) revealed the following birds late enough in June to be breeding: crossbill, white-breasted nuthatch, Clarke nutcracker, ruby-crowned kinglet, pileated woodpecker, Rocky Mountain jay and the varied thrush. Seeing this last bird on Mica Peak, June 3, seems especially noteworthy. The discovery of the western evening grosbeak in the winter in the Spokane Valley at 1900 feet, and the yellow-rumped warbler in the spring migration at Ritzville, fifty miles southwest and lower, probably indicate that these species were present but missed in Cheney.

The two years were different in several respects. The winter of 1904-05 was a good "pine cone year," so that black-headed jays and crossbills were not rare, as was the case the next winter. The pine siskin was abnormally rare in the first winter and the varied thrush in the second.

The distribution of rainfall is as follows: Jan. 1.58 inches; Feb. 1.52; Mar. .64; Apr. 1.17; May 2.10; June .27; July .72; Aug. .31; Sept. 1.22; Oct. 1.55; Nov. 4.06; Dec. 2.00. Total 17.14 inches. The result is a striking difference in the environment between the spring and late summer. In the spring there is an abundance of bird food, plant lice being especially plentiful, while in the late summer and fall the country is parched. This in connection with the proximity of less dry regions in the mountains close at hand produces a marked effect upon bird migration. Many

*species leave long before the regular fall migration.* I believe this holds for the whole Columbian Plateau. The robin is especially affected, and the Cassin finch not at all.

I have distinguished a difference between the "phoebe" calls of the chickadee and mountain chickadee. Here the chickadee gives but one "phoe" note, altho there may be one or two of the "be" notes. The mountain chickadee, however, gives two "phoe" notes, which may be followed by one or two of the "be" notes. Doubtless exceptions occur, but I have not heard them.

I have noticed six cripples among birds during the twenty-two months. A mallard duck was brought to me with a bill once injured probably by a gunshot or barb wire, which had entirely healed; but the tongue was torn so that it hung down at the base of the bill. The bird was extremely emaciated and was doubtless starving. A lazuli bunting had an injured wing, which, tho there was no fresh wound, prevented the bird from flying more than short distances. A one-legged killdeer hopped successfully on one foot. Three crippled Brewer blackbirds were seen in the flock which frequents the town feed lot in the fall after most of the others had gone south. This rather large number is to be explained, I think, by segregation, since they found picking up the scattered seed better suited to their capacities than the varied actions of the large flocks assembling for the migration. One of these had a crooked leg, another had no foot and only a part of the shank, and the third evidently had a compound fracture of the "thigh." The first two were seen for some time, but as the last was observed only once, it probably soon died. I am convinced from these observations and others that there is little competition for food among birds of the same species here, but that the principal cause of death among them are enemies and the physical environment.

In this list of birds, the dates, when given, are the mean dates of arrival for the years '04 and '05. They are not given when observations were too few to make the date significant.

#### PERMANENT RESIDENTS

- Colinus virginianus.* Bob-white. Introduced.
- Bonasa umbellus togata.* Canadian Ruffed Grouse.
- Pediocetes phasianellus columbianus.* Columbian Sharp-tailed Grouse.
- Buteo borealis calurus.* Western Red-tailed Hawk.
- Megascops asio* subsp? Screech Owl.
- Bubo virginianus saturatus.* Dusky Horned Owl.
- Surnia ulula caparoch.* American Hawk Owl.
- Colaptes cafer collaris.* Red shafted Flicker.
- Pica pica hudsonica.* Black-billed Magpie.
- Cyanocitta stelleri annectens.* Black-headed Jay. Irregular.
- Agelaius phoeniceus neutralis.* San Diego Red-wing.
- Astragalinus tristis pallidus.* Pale Goldfinch.
- Melospiza cinerea merrilli.* Merrill Song Sparrow.
- Olbiorchilus hiemalis pacificus.* Western Winter Wren. Rare.
- Parus atricapillus.* Chickadee.
- Sitta pygmæa.* Pygmy Nuthatch.

#### WINTER VISITANTS

- Dryobates villosus monticola.* Rocky Mountain Hairy Woodpecker. Rare.
- Xenopicus albolarvatus.* White-headed Woodpecker. Rare.
- Otocoris alpestris arcticola.* Pallid Horned Lark. Rare.

- Loxia curvirostra minor.* Crossbill. Sometimes seen late.  
*Leucosticte tephrocotis littoralis.* Hepburn Rosy Finch. Nov. 16-Mar. 8.  
*Acanthis linaria.* Redpoll.  
*Ampelis garrulus.* Bohemian Waxwing. Irregular.  
*Certhia familiaris montana.* Rocky Mountain Creeper.  
*Sitta carolinensis nelsoni* Rocky Mountain Nuthatch. Possibly a few breed.  
*Sitta canadensis.* Red-breasted Nuthatch.  
*Parus gambeli.* Mountain Chickadee. A few remain and breed.

## TRANSIENT VISITANTS

- Lophodytes cucullatus.* Hooded Merganser.  
*Mareca americana.* Baldpate.  
*Clangula clangula americana.* American Golden-eye.  
*Charitonetta albeola.* Bufflehead.  
*Branta canadensis.* Canada Goose.  
*Grus mexicana.* Sandhill Crane.  
*Selasphorus rufus.* Rufous Hummingbird.  
*Stellula calliope.* Calliope Hummingbird. Rare.  
*Zonotrichia leucophrys gambeli.* Intermediate Sparrow. Feb. 19-Apr. 27.  
*Junco hyemalis connectens.* Intermediate Junco. A few breed.  
*Piranga ludoviciana.* Louisiana Tanager. A few breed.  
*Helminthophila rubricapilla gutturalis.* Calaveras Warbler. Rare.  
*Wilsonia pusilla pileolata.* Pileolated Warbler. May 17.  
*Anthus pensylvanicus.* American Pipit.  
*Regulus calendula.* Ruby-crowned Kinglet.  
*Myadestes townsendi.* Townsend Solitaire. Rare.  
*Ixoreus naevius subsp?* Varied Thrush. Mar. 5.

## SUMMER VISITANTS

- Colymbus holboelli.* Holboell Grebe.  
*Gavia imber.* Loon.  
*Hydrochelidon nigra surinamensis.* American Black Tern. May 7.  
*Anas boschas.* Mallard. Feb. 28.  
*Nettion carolinensis.* Green-winged Teal.  
*Querquedula cyanoptera.* Cinnamon Teal.  
*Aythya americana.* Redhead.  
*Erisomatura jamaicensis.* Ruddy Duck.  
*Botaurus lentiginosus.* American Bittern.  
*Ardea herodias.* Great Blue Heron.  
*Gallinula galeata.* Florida Gallinule.  
*Fulica americana.* Coot.  
*Steganopus tricolor.* Wilson Phalarope.  
*Gallinago delicata.* Wilson Snipe.  
*Actitis macularia.* Spotted Sandpiper.  
*Numenius longirostris.* Long-billed Curlew.  
*Oxyechus vociferus.* Killdeer. A few winter.  
*Zenaidura macroura.* Mourning Dove. May 9.  
*Buteo swainsoni.* Swainson Hawk.  
*Falco mexicanus.* Prairie Falcon.  
*Falco sparverius.* Sparrow Hawk. April 16.  
*Pandion haliaetus carolinensis.* Fish Hawk.

- Speotyto cunicularia hypogaea.* Burrowing Owl. May 14.  
*Ceryle alcyon.* Belted Kingfisher.  
*Dryobates pubescens homorus.* Batchelder Woodpecker.  
*Sphyrapicus varius nuchalis.* Red-naped Sapsucker. Rare.  
*Asyndesmus lewisi.* Lewis Woodpecker.  
*Phalaenoptilus nuttalli.* Poor-will.  
*Chordeiles virginianus henryi.* Western Nighthawk. May 31.  
*Trochilus alexandri* Black-chinned Hummingbird.  
*Tyrannus tyrannus.* Kingbird. May 23.  
*Tyrannus verticalis.* Arkansas Kingbird, May 3.  
*Sayornis saya.* Say Phoebe. Mar. 16.  
*Contopus richardsoni.* Western Wood Pewee. May 18.  
*Otocoris alpestris merrilli.* Dusky Horned Lark.  
*Corvus brachyrhynchos.* American Crow. May 23.  
*Nucifraga columbiana.* Clark Nutcracker. Irregular.  
*Molothrus ater.* Cowbird.  
*Xanthocephalus xanthocephalus.* Yellow-headed Blackbird. April 17.  
*Sturnella magna neglecta.* Western Meadowlark. Feb. 22.  
*Icterus bullocki.* Bullock Oriole.  
*Euphagus cyanocephalus.* Brewer Blackbird. A few remain.  
*Carpodacus cassini.* Cassin Purple Finch. April 8.  
*Spinus pinus.* Pine Siskin.  
*Pooecetes gramineus confinis.* Western Vesper Sparrow.  
*Passerculus sandwichensis alaudinus.* Western Savanna Sparrow.  
*Chondestes grammacus strigatus.* Western Lark Sparrow.  
*Spizella socialis arizonæ.* Western Chipping Sparrow. Apr. 13.  
*Pipilo maculatus megalonyx.* Spurred Towhee.  
*Zamelodia melanocephala.* Black-headed Grosbeak.  
*Cyanospiza amœna.* Lazuli Bunting.  
*Petrochelidon lunifrons.* Cliff Swallow. May 9.  
*Hirundo erythrogaster.* Barn Swallow. May 16.  
*Iridoprocne bicolor.* Tree Swallow. Rare.  
*Tachycineta thalassina lepida.* Northern Violet-green Swallow. Mar. 14.  
*Stelgidopteryx serripennis.* Rough-winged Swallow.  
*Vireo gilvus swainsoni.* Western Warbling Vireo. May 18.  
*Vireo solitarius cassini.* Cassin Vireo. May 8.  
*Dendroica æstiva.* Yellow Warbler. May 9.  
*Geothlypis tolmiei.* Tolmie Warbler.  
*Geothlypis trichas occidentalis.* Western Yellow-throat. May 5.  
*Setophaga ruticilla.* Redstart. May 19.  
*Galeoscoptes carolinensis.* Catbird.  
*Troglodytes aedon parkmani.* Parkman Wren. May 20.  
*Telmatodytes palustris plesius.* Interior Tule Wren.  
*Hylocichla fuscescens salicicola.* Willow Thrush. May 21.  
*Merula migratoria propinqua.* Western Robin. Feb. 17.  
*Sialia mexicana bairdi.* Chestnut-backed Bluebird. Feb. 29.  
*Sialia arctica.* Mountain Bluebird.

*Cheney, Wash.*